

## REMARKS

Claims 34-58 are pending in the present application.

The Examiner rejected claims 34, 37-43, 45-48, 51-55, and 58 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,790,536 (*Mahany*) in view of *del Castillo*. Applicants respectfully traverse this rejection, and assert that neither *Mahany*, nor *del Castillo*, when considered alone or in combination, render the rejected claims unpatentable.

The Examiner asserts that *Mahany* teaches all except the last feature of claim 1. The Applicants respectfully disagree, and maintain that *Mahany* at least does not teach the claimed feature of a second second-tier base station that is intermediate the first second-tier base station and the remote unit. The term “intermediate” indicates that the first second-tier base station communicates with the remote unit via (i.e., the intermediate) second second-tier base station. As explained below, the cited references fail to teach at least this claimed feature.

In the Office Action, the Examiner asserts that access point 3021 of Figure 28A of *Mahany* corresponds to the first second-tier base station and that computer terminal 3007 and storage terminal 3031 correspond to the second second-tier base stations. According to the Examiner, the access point 3021 meets the claimed feature of “second second-tier base station” because the access point 3021 is able to communicate with a first-tier base station (e.g., access point 3015 or 3017) and second second-tier base stations (e.g., terminal 3007 and 3031). In making this assertion, the Examiner simply ignores the other expressly recited claim feature that the “second second-tier base station is intermediate the first second-tier base station and the remote unit.” The term “intermediate” indicates that the first second-tier base station

communicates with the remote unit via (i.e., the intermediate) second second-tier base station. *Mahany*, however, does not teach this claimed feature. In particular, *Mahany* does not teach that the access point 3021 (which the Examiner asserts corresponds to first second-tier base station) communicates with the printer 3013 (remote unit, according to the Examiner) via the terminal 3007 or 3031 (second second-tier base station, according to the Examiner). To the contrary, at most, *Mahany* teaches that communication with the printer 3013 occurs from the access point 3021 to the printer 3013 or from the terminal 3007/3031 to the printer, but not from the access point 3021 to the printer 3013 through an intermediate terminal 3007/303. *See Mahany* (stating, at col. 44, lines 49-51 that the “terminal 3007 establishes a peripheral LAN with printer 3013 which begins printing the collected information.”); *see also* at col. 46, lines 11-14 (stating that the storage device 3031 may generate a printout via a peripheral LAN established with the printer). Thus, *Mahany* does not teach that second second-tier base station is “intermediate” the first second-tier base station and the remote unit. Rather, as acknowledged by the Examiner on page 8 of the Office Action, *Mahany* teaches communicating with other peripheral devices such as printer 3013 by creating a peripheral LAN connection with that peripheral device; *Mahany* does not teach that the access point 3021 communicates with the printer 3031 via the terminals 3007/3031. As such, because *Mahany* fails to teach that the access point 3021 communicates with the printer 3013 via terminals 3007/3031, these terminals cannot be “intermediate” the first second-tier base station and the remote unit.

Thus, for reasons presented above, *Mahany* does not teach or even suggest a second second-tier base station that is intermediate the first second-tier base station and the remote unit. Thus, claim 1 is distinguishable over *Mahany*. Moreover, claim 1 is further patentable over *Mahany* in view of the teachings of *Del Castilloi*. As an initial matter, *Del Castilloi* teaches

away from the claimed invention. *Del Castilloi* teaches using the same protocol for communications between the HTU 18 and the various AMSs 12 (including the so-called tier-1 and tier-2 AMSs). This teaching is in contrast to *Mahany*, which the Examiner asserts discloses different protocols between the first and second tier access points. Thus, if anything, *Del Castilloi* teaches away from the claimed invention. And as the Examiner is well aware, there can be no motivation or suggestion to combine references as a matter of law where one of the references teaches away from the claimed invention. *In re Fine*, 5 U.S.P.Q.2d (BNA) 1596, 1599 (Fed. Cir. 1988).

A closer look at *Mahany* and *Del Castilloi* further reveals that the requisite suggestion or motivation to combine the two references is missing in the instant case, as is the reasonable expectation of success. As previously noted, *Mahany* teaches that the access point 3021 can communicate with various other devices that are coupled to the same peripheral LAN. Thus, in *Mahany*, the notion of communicating through an intermediate base station (i.e., the second second-tier base station) is not applicable because the first second-tier base station (the access point 3021) can simply communicate with an end device (e.g., printer 3013) by establishing a peripheral LAN connection with that device. In contrast, *Del Castilloi* teaches sequentially connecting the various AMSs 12 (which the Examiner asserts correspond to the first and second second-tier base stations). Thus, the respective connecting architectures disclosed in *Mahany* and *Del Castilloi* for devices the Examiner alleges correspond to the “second-tier bases stations” are inconsistent with each other, thus indicating a lack of motivation to combine as well as negating an reasonable expectation of success. As the Examiner is aware, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both

be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142.

The Office Action contains other deficiencies that need be addressed herein in view of the above-presented reasons. For example, consider claim 45, which calls for a third second-tier base station intermediate the remote unit and the second second-tier base station, wherein the second second-tier base station communicates with the remote unit through the third second-tier base station. The Examiner asserts that the computer terminal 3007 corresponds to the second second-tier base station, the storage terminal 3031 corresponds to the third second-tier base station, and the remote unit corresponds to the printer 3013. Under Examiner's application of *Mahany*, however, the *Mahany* reference fails teach a third second-tier base station (storage terminal 3031) that is intermediate the remote unit (printer 3013) and the second second-tier base station (terminal 3007), wherein the second second-tier base station (terminal 3007) communicates with the remote unit (printer 3013) through the third second-tier base station (storage terminal 3031). The text cited by the Examiner (namely col. 46, lines 11-14) simply describes that the storage terminal 3031 can print to the printer 3013. Thus, for at least this reason, claim 45 (and the corresponding claim 48) is allowable.

In the Office Action, the Examiner construes that the term "protocol" according to its plain and ordinary meaning as defined in the dictionary. As such, the term "protocol," as it is used in the claims, should be construed consistent with the manner the Examiner construction of the term.

For the reasons presented above, independent claims 34, 47, and 55, are allowable. Additionally, the rejected claims depending from these independent claims are allowable for at least the same reason. Reconsideration of the present application is respectfully requested.

The Applicants make one point of clarification with respect to Examiner's comments in the Office Action on page 3 regarding Applicants reliance on features (such as the communication protocol IEEE 802) to distinguish the cited references. The Examiner asserts that these references are not recited in the claims. The Applicants agree with the Examiner insofar as the claims do not recite these features. The Applicants, however, disagree with the Examiner's suggestion that the Applicants were attempting to distinguish the prior art based on the exemplary description in that Response. To the contrary, the Applicants were merely providing non-limiting exemplary references for the benefit of the Examiner, and were not intended to limit the claims in any shape or form.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Houston, Texas telephone number (713) 934-4064 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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